REMARKS

Claims 1-72 are pending. Claims 1-72 are rejected under 35 U.S.C. § 103(a). Claims 1, 27, 50, and 58 are currently amended.

Examiner has objected to the drawings, and stated Figures 1-3 should be designated prior art. Applicants respectfully disagree. Referring to page 5, lines 5-8, Figures 1-2 include a preferred embodiment of the present invention. Figure 3 was disclosed in Application Ser. No. 09/316,193, filed May 21, 1999, (page 11, line 11) which applicants do not believe is a reference. Thus, Figures 1-3 should not be designated Prior Art.

Applicants have amended independent claims 1, 27, 50, and 58 in response to an interview with Examiner Chang on January 5, 2006. Applicants maintain that novel features of independent claims 1, 27, 50, and 58 were not disclosed in any of the cited references, since Nortel (TSGR1#2(99)090 and TSGR1#5(99)684) do not disclose the claimed primary and secondary synchronization code sequences. However, applicants respectfully request entry of the foregoing amendment to eliminate any chance of confusion. MPEP 714.13 states the following.

> Except where an amendment merely cancels claims, adopts examiner suggestions, removes issues for appeal, or in some other way requires only a cursory review by the examiner, compliance with the requirement of a showing under 37 CFR §1.116(b)(3) is expected in all amendments after final rejection.

Here, the foregoing amendment is responsive to Examiner's suggestion to clarify the claim language. Furthermore, the amendment is a minor change and only requires a cursory review. Finally, to the extent the amendment eliminates confusion, it presents the claims in better form for consideration on appeal.

Examiner has rejected independent claims 1, 27, 50, and 58 under 35 U.S.C. § 103(a) as unpatentable over Jamal et al. (U.S. Pat. No. 5,930,366) in view of Nortel (TSGR1#2(99)090 and TSGR1#5(99)684).

TI-29347, Page 16

PAGE 17/23 * RCVD AT 1/6/2006 3:46:42 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/42 * DNIS:2738300 * CSID:7197830990 * DURATION (mm-ss):05-50

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicants respectfully submit that no combination of the cited references teach or suggest all the claim limitations.

Examiner admits that Jamal fails to disclose "wherein the third sequence comprises a subset of bits from the first sequence" as required by claims 1-26. Examiner relies on Nortel for this missing limitation. Examiner states that Nortel discloses this limitation at page 3, lines 20-24. (the paragraph before 3. Analysis, TSGR1#2). Therein, Nortel discloses:

> Each of the 17 SSCs is constructed by the position wise addition modulo 2 of a Hadamard sequence (different for each SSC) and a hierarchical sequence used also for the PSC on a Primary SCH (see ETSI UMTS XX.05, Section 7.2.3 Synchronization codes and ARIB Volume 3 Specifications of Air-Interface for 3G Mobile System, section 3.2.4.2.2.2.2.2.2. Spreading Code Generation for Search Codes).

Claims 1 and 27, as amended, recite "wherein the third sequence comprises a consecutively repeated sequence of bits from the first sequence." Claims 50 and 58, as amended, recite "wherein the third code sequence comprises a consecutively repeated sequence of bits of the first code sequence." Examiner has identified the Nortel hierarchical sequence used also in the PSC as this third sequence of the present invention. Nortel, however, fails to disclose that the hierarchical sequence is a consecutively repeated sequence of the PSC as required by independent claims 1, 27, 50, and 58. Thus, claims 1-63 are patentable under 35 U.S.C. § 103(a).

By way of explanation, the third sequence recited in claims 1, 27, 50, and 58 is illustrated at Figures 5, 8, and 11 of the instant specification. Referring to Figure 5, for example, a third sequence "A, A, A . . ." (38) is a consecutively repeated sequence of bits of the first code sequence (32).
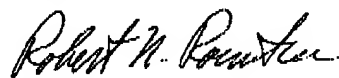
There is no disclosure of such a sequence in any of the cited references. By way of further explanation, applicants offer the merged document cited by Nortel at APPENDIX A of this response. Technical specification TS 25.213 shows that it was merged from ETSI XX.05 and ARIB 3.2.4 sources. (page 26, line 3). Subsequent revision history on page 26 shows there has been no change to Section 5.2.3 (Synchronization Codes), cited by Nortel as section 7.2.3. Therein, primary and secondary synchronization code generation is described in detail in Section 5.2.3.1. (pages 22-23). In particular, the last line of page 22 discloses that the primary synchronization code Cp is the same as the secondary synchronization code $C_{SCH,0}$. There is no teaching or suggestion of a third sequence that is either a subset or repeated subset of the first sequence. Thus, claims 1-63 are patentable under 35 U.S.C. § 103(a).

Examiner has rejected independent claims 64 and 69 under 35 U.S.C. § 103(a) as unpatentable over Jamal et al. (U.S. Pat. No. 5,930,366) in view of Nortel and Popovic' (U.S. Pat. No. 6,567,482). Referring to Figure 11 of the instant specification, independent claims 64 and 69 recite "wherein the third code sequence (T_3) includes a plurality of subsets of bits $(C = A, \overline{B})$, each subset including a fourth sequence of bits (A) from the first code sequence and a complement of a fifth sequence of bits (B) from the first code sequence." These features are neither taught nor suggested by the cited references.

Examiner states "the an(k) and bn(k) are two complementary sequence of the first sequence '482." Office Action of 9/6/2005, page 9). First, applicants do not understand this explanation. But even if it is true, it is irrelevant to the claimed invention. Both claims 64 and 69 require a third code sequence that includes a plurality of subsets of bits. Each subset includes a fourth sequence of bits from the first code sequence and a complement of a fifth sequence of bits from the first code sequence. Examiner has failed to identify these limitations from the cited references. Thus, claims 64-72 are patentable under 35 U.S.C. § 103(a).

In view of the foregoing, applicants respectfully request reconsideration and allowance of claims 1-72. If the Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,

Robert N. Rountree
Attorney for Applicants
Reg. No. 39,347

Robert N. Rountree, LLC
70360 Highway 69
Cotopaxi, CO 81223
Phone/Fax: (719) 783-0990